

REMARKS

Claims 1-5 and 13-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Noble in view of Foley. This rejection is respectfully traversed.

The Examiner acknowledges that Noble fails to teach an analysis file which does not contain imaging data, said analysis file containing mathematics representing the model surface. The Examiner relies on Foley for teaching an analysis file containing mathematics representing the model surface and proposes combining Foley with Noble because such a modification would save space.

Applicants submit that there is insufficient motivation to provide such analysis files in Noble. Noble is concerned with generating the best field of view for graphically depicting IC structures. Thus, the data necessary in Noble is graphical. There is no need in Noble for an analysis file which does not contain imaging data, said analysis file containing mathematics representing the model surface. Such data would then have to be converted into a graphical representation, increasing processing in Noble.

As noted in MPEP § 2143, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. Furthermore, if proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. See MPEP § 2143.01. In the present case, Noble is concerned with generating graphical representations of IC structures. An analysis file which does not contain imaging data, but rather contains mathematics representing the model surface, would not be beneficial. This would only require additional processing time to generate the graphical depiction. Thus, there is

insufficient motivation to modify Noble with the teachings of Foley as proposed by the Examiner.

For the above reasons, claim 1 is patentable over Noble in view of Foley. Claims 2-5 depend from claim 1 and are patentable over Noble in view of Foley for at least the reasons advanced with reference to claim 1. Claims 13-17 include features similar to those discussed with reference to claim 1 and are patentable over Noble in view of Foley for at least the reasons advanced with reference to claim 1.

Claims 6 and 18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Noble in view of Warmerdam. This rejection is respectfully traversed for the following reasons.

Warmerdam discloses a bubble hierarchy that describes an object through a hierarchical arrangement of bubbles, where the bottom of the hierarchy includes bubbles that describe a small fragment of the object. It is not clear how this teaching can be used to modify Noble to include "a list of specified surfaces on said model and data relating to the smallest possible three-dimensional region that can enclose each specified surface." As noted by the Examiner, the bubble hierarchy is useful for determining whether two objects intersect. This is applied to situations to control the motions of machines and robots to avoid collision (col. 1, ll. 10-27; col. 2, ll. 19-28). The structures in Noble are not moving structures and it is not clear why one of ordinary skill in the art would apply the bubble hierarchy, used to plan motion of moving objects, to a structure that is static (structures on the IC of Noble). There is simply no motivation to perform this modification to Noble other than Applicants' specification and claims.

Thus, the rejection of claims 6 and 18 under 35 U.S.C. § 103(a) as being unpatentable over Noble in view of Warmordam should be withdrawn.

In view of the foregoing and remarks, Applicants submit that this application is in condition for allowance. Early notification to this effect is requested.

If there are any fees due in connection with this response, please charge such fees to deposit account 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,

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Date: May 12, 2004